

## INFORMATION DISCLOSURE STATEMENT BY APPLICANTED

(use as many sheets as necessary)

Sheet 1 of 6

Complete if Known

Application Number:

09/770,410

Filing Date:

01/25/2001

First Named Inventor:

Christian Huber, et al.

Art Unit:

1723

**Examiner Name** 

Therkorn, Ernest G.

Attorney Docket Number:

P-576

Confirmation No.

U.S. PATENT DOCUMENTS									
*EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER – KIND CODE (IF KNOWN)	PUBLICATION DATE MM/DD/YYYYY	NA	ME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	PAGES, COLUMNS, LINES, WHERE RELEVANT PASSAGES OR RELEVANT FIGURES APPEAR SUB		APPEAR	
E6T		5,310,463	5/10/1994	Da	doo et al.	204 180.1		O. J	
E67		5,334,310	8/2/1994	Fre	echet et al.	20 1982		8,2	
E6		5,342,492	8/30/1994	Da	doo et al.	204		18a.	Ħ_
EGT		5,378,334	1/3/1995	Da	doo et al.	204	<u></u>	180.1	
E6T		5,423,513	6/13/1995	Ch	ervet et al.	250	5	1 22%	2
E6 T		5,453,185	9/26/1995	Fre	echet et al.	210 0 1982		Ğ	
医的		5,585,236	12/17/1996	Во	nn et al.	435		S	
E67		5,935,429	8/10/1999	Lia	o et al.	2/0		198.	7
E 61		5,998,604	12/7/1999	Fe	aron et al.	536		25.	1
ECY		6,024,878	2/15/2000	Gje	erde et al.	2/0		633	5
E61		6,063,589	5/16/2000	Ke	llogg et al.	435 24			
		FC	DREIGN PA	TEN	NT DOCUMENTS		,		
*EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER - KIND CODE (IF KNOWN)	PUBLICATION DATE MM/DD/YYYYY	NAI	ME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	PAGES, COLUMNS, LINES, WHERE RELEVANT PASSAGES OR RELEVANT FIGURES APPEAR COUNTRY CLASS SUR			
EG+		WO 90/07965	7/26/1990	B <del>IO</del>	HJERTAP RAD LABORATORIES, INC.	PCT	210	635	:
E67		WO 98/40395	9/17/1998	TR/	G'JERDE NOGENOMIC, INC.	PCT	210	635	
E6T		WO 00/15778	3/23/2000	<b>∀AF</b>	RIAN, INC. HATCH	Рст	210	635	
E67		WO 01/55713 A2	8/2/2001	TR/	INSGENOMIC, INC. HUBEL	PCF	2/0	635	
EXAMINER SIGNATURE DATE CONSIDERED									
THERKORY 10/9/02					10/91	102			

SEP 3 0.2002

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT PADEL

(use as many sheets as necessary)

Sheet 2 of 6

Complete if Known

Application Number:

09/770,410

Filing Date:

01/25/2001

First Named Inventor:

Christian Huber, et al.

Art Unit:

1723

**Examiner Name** 

Therkorn, Ernest G.

Attorney Docket Number:

P-576

Confirmation No.

			U.S. PATE	ENT DOCUMENTS		
*EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER - KIND CODE (IF KNOWN)	PUBLICATION DATE MM/DD/YYYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	PAGES, COLUMNS, L PASSAGES OR RELI	INES, WHERE RELEVANT EVANT FIGURES APPEAR Sub
E6 T		6,238,565	5/29/2001	Hatch	210	635
E6 T		6,355,791	3/12/2002	Gjerde et al.	536	254
EGY		US 2002/0017487 A1	2/14/2002	Huang	2/0	630
						, 유 M
						$^{\prime}$ $^{1}_{2}$ $^{\circ}$
					7	- 20
					D	202
						,
		FC	REIGN PA	ATENT DOCUMENTS		
*EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER - KIND CODE (IF KNOWN)	PUBLICATION DATE MM/DD/YYYYY	NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT	PAGES, COLUMNS, L RELEVANT PASS RELEVANT FIGURE	AGES OR ES APPEAR
医矿		EP 0597552A1	5/18/1994	LC PACKINGS - Chervet INTERNATIONAL	Europau Peter	y 20 635
				·	-	
EXAMINER SIG	NATURE			DATE CONSIDERED		
		THERKORN		/	0/9/02	

(use as many sheets as necessary)

Sheet 3 of 6

Complete if Known

**Application Number:** 

09/770,410

Filing Date:

01/25/2001

First Named Inventor:

Christian Huber, et al.

Art Unit:

1723

**Examiner Name** 

Therkorn, Ernest G.

Attorney Docket Number:

P-576

Confirmation No.

		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~				
		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
*EXAMINER INITIAL	CITE NO.	Include name of the author (in CAPITAL LETTERS), Title of the item, date, page(s), volume-issue numbers, publisher, city and/or country where published				
EGT		Afeyan et al. J. Chromatogr., 519:1-29 (1990)				
E61		Dadoo et al. ADVANCES TOWARD THE ROUTINE USE OF CAPILLARY ELECTROCHROMATOGRAPHY, LC-GC, 15:630-635 (1997)				
E6T		Ericson et al. PREPARATION OF CONTINUOUS BEDS FOR ELECTROCHROMATOGRAPHY AND REVERSED-PHASE LIQUID CHROMATOGRAPHY OF LOW-MOLECULAR-MASS, Journal of Chromatography A, 767:33-41 (1997)				
E61		Fields, SILICA XEROGEL AS A CONTINUOUS COLUMN SUPPORT FOR HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY Anal. Chem., 68:2709-2712 (1996)				
E6+		Fujimoto et al. Fritless Packed Columns for Capillary Electrochromatography: Separation of Uncharged Compounds on Hydrophobic Hydrogels, Anal. Chem., 68:2753-2757 (1996)				
EGY		Fujimoto et al. Capillary Electrochromatography of Small Molecules in Polyacryamide Gels with Electroosmotic Flow, Journal of Chromatography A, 716 107-113 (1995)				
E61		Griffey et al. Characterization of Oligonucleotide Metabolism in Vivo Via Liquid Chromatography/Electrosspray Tandem Mass Spectrometry with a Quadrupole Ion Trap Mass Spectrometry, Journal of Mass Spectrometry, 32: 305-313 (1997)				
EGT		Grim, CAPILLARY LC WITH AUTOMATED ON-LINE MICROFRACTION COLLECTION ONTO MALDI/TOF MS TRAGETS, Int. Biotechnol. Laboratory, October 1997 ア46 ほ 58				
E6t		Gusev et al. Capillary Columns with in Situ Formed Porous Monolithic Packing for Micro High- Performance Liquid Chromatography and Capillary Electrochromatography, Journal of Chromatography A. 855: 273-290 (1999)				
EGT		He et al. FABRICATION OF NANOCOLUMNS FOR LIQUID CHROMATOGRAPHY, Anal. Chem., 70: 3790-3797 (1998)				
E6+		Hirata et al. J. Chromatogr., 186:521-528 (1979)				
E61		Hjerten et al. Continuous Beds: High-Resolving, Cost-Effective Chromatographic Matrices, Nature, 356: 810-811 (1992)				
EGT		http://www.lcpackings.nl (April 14, 2000) pases 1-48				
EGT		Huang et al. CAPILLARY ZONE ELECTROPORESIS WITH FLUID-IMPERVIOUS POLYMER TUBING INSIDE A FUSED-SILICA CAPILLARY, Journal of Chromatography A, 788: 155-164 (1997)				
IEGT		Huang et al. SURFACE-ALKYLATED POLYSTYRENE MONOLITHIC COLUMNS FOR PEPTIDE ANALYSIS IN CAPILLARY LIQUID CHROMATOGRAPHY-ELECTROSPRAY IONIZATION MASS SPECTROMETRY, Anal. Chem., 74: 2336-2344 (2002)				
FCT		Huber et al. HIGH-RESOLUTION LIQUID CHROMATOGRAPHY OF OLIGONUCLEOTIDES ON NONPOROUS ALKYLATED STYRENE-DIVINYLBENZENE COPOLYMERS, Analytical Biochemistry, 212:351-358 (1993)				
EXAMINER		THERKORN DATE CONSIDERED 10/9/02				

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 6

Complete if Known

Application Number:

09/770,410

Filing Date:

01/25/2001

First Named Inventor:

Christian Huber, et al.

Art Unit:

1723

**Examiner Name** 

Therkorn, Ernest G. ...

Attorney Docket Number:

P-576

 $\Sigma$ 

Confirmation No.

		965				
		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
*EXAMINER INITIAL	CITE NO.	Include name of the author (in CAPITAL LETTERS), Title of the Item, date, page(s), volume-is numbers, publisher, city and/or country where published				
E6T		Huber et al. On-Line Cation Exchange for Suppression of Adduct Formation in Negative-Ion Electrospray Mass Spectrometry of Nucleic Acids, Anal. Chem., 70: 5288-5295 (1998)				
E6t		Huber et al. ANALYSIS OF NUCLEIC ACIDS BY CAPILLARY ION-PAIR REVERSED-PHASE HPLC COUPLED TO NEGATIVE-ION ELECTROSPRAY IONIZATION MASS SPECTROMETRY, Anal. Chem., 71:3730-3739 (1999)				
ECT		Huber et al. RAPID AND ACCURATE SIZING OF DNA FRAGMENTS BY ION-PAIR CHROMATOGRAPHY ON ALKYLATED NONPOROUS POLY(STYRENE-DIVINYLBENZENE) PARTICLES, Analytical Chemistry, 67:578-585 (1995)				
ECT		Huber et al. Sheath Liquid Effects Capillary High-Performance Liquid Chromatography-Electrospray Mass Spectrometry of Oligonucleotides, Journal of Chromatography A, 870:413-424 (2000)				
EGT		Huber et al. A Comparison of Micropellicular Anion-Exchange and Reversed-Phase Stationary Phases for HPLC Analysis of Oligonucleotides, LC-GC, 14:114-127 (1996)				
E6+		Huber et al. Mutation Detection by Capillary Denaturing High-Performance Liquid Chromatography Using Monolithic Columns, J. Biochem. Biophys Methods, 47:5-19 (2001)				
EGT		Ishizuka et al. Chromatography Properties of Miniaturized Silica Rod Columns, J. High Resol. Chromatogr., 21:477-479 (1998)				
EGT		Jorgenson et al. HIGH-RESPOLUTION SEPARTION BASED ON ELECTROPHORESIS AND ELECTROOSMOSIS, J. of Chromatography, 218:209-216 (1981)				
E6T		Karlsson et al. Anal. Chem., 60:1662-1665 (1988)				
EST		Kennedy et al. Anal. Chem., 61:1128-1135 (1989)				
EGT		Martin et al. Biochem J., 35:1358 (1941)				
EGT		McGuffin et al. Anal. Chem., 55:580-583 (1983)				
E67		McLuckey et al. Tandem Mass Spectrometry of Small, Multiply Charged Oligodeoxynucleotides, 3:60-70 (1992)				
EGT		Minakuchi et al. Octadecylsilylated Porous Silica Rods as Separation Media for Reversed-Phase Liquid Chromatography, Anal. Chem. 68:3498-3501 (1996)				
EGT		Muddiman et al. Characterization of PCR Products from Bacilli Using Electrospray Ionization FTICR Mass Spectrometry, Anal. Chem., 68:3705-3712 (1996)				
ECT		Muddiman et al. Precise Mass Measurement of a Double-Stranded 500 Base-Pair (309 kDa) Polymerase Chain Reaction Product by Negative Ion Electrospray Ionization Fourier Transform Ion Cyclotron, Rapid Commun. Mass Spectrom., 13:1201-1204 (1999)				
EXAMINER		THERKORN DATE CONSIDERED OCTOBER 9, 2002				

SEP 3 U 2002

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Substitute for Form 1449A/PTO

Sheet 5 of 6

Complete if Known

Application Number:

09/770,410

Filing Date:

01/25/2001

First Named Inventor:

Christian Huber, et al.

Art Unit:

1723

**Examiner Name** 

Therkorn, Ernest G.

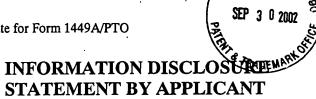
Attorney Docket Number:

P-576

Confirmation No.

6186

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
*EXAMINER INITIAL	CITE NO.	Include name of the author (in CAPITAL LETTERS), Title of the item, date, page(s), volume-issu numbers, publisher, city and/or country where published				
ECH		Nordhoff et al. Mass Spectrometry of Nucleic Acids, Mass Spectrometry Reviews, 15:67-138 (1996)				
EG+		Novotny, J. Chromatogr. B, 689: 55-70 (1997)				
Ect		Novotny, Anal. Chem., 60:500A-510A (1988)				
EGT		Oberacher et al. Preparation and Evaluation of Packed Capillary Columns for the Separation of Nucleic Acids by Ion-Part Reversed-Phase High-Performance Liquid Chromatography, J. of Chrom. A, 893:23-35 (2000)				
E6+		Palm et al. Macroporous Polyacrylamide/Poly (Ethylene Glycol) Matrixes as Stationary Phases in Capillary Electrochromatography, Anal. Chem., 69:4499-4507 (1997)				
<b>E6</b> +	-	Peters et al. Molded Rigid Polymer Monoliths as Separation Media for Capillary Electrochromatography Anal. Chem., 69:3645-3649 (1997)				
E6T		Peters et al. Molded Rigid Polymer Monoliths as Separation Media for Capillary Electrochromatography 2. Effect of Chromatographic Conditions on the Separation, Anal. Chem., 70:2296-2302 (1998)				
E61		Petro et al. MOLDED MONOLITHIC ROD OF MACROPROUS POLY (STYRENE-CO-DIVINYLBENZENE) AS A SEPARATION MEDIUM FOR HPLC OF SYNTHETIC POLYMERS, Analytical Chemistry, 68:315-321 (1996)				
EG+		Petro et al. J. Chromatogr. A, 752:59-66 (1996)				
EG+		Poole et al. Chromatography Today, Elsevier, Amsterdam (1995)				
EG+		Potier et al. Nucleic Acids Res., 22:3895-3903 (1994)				
EGT	Premstaller et al. HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY-ELECTROSPRAY IONIZATION MASS SPECTROMETRY OF SINGLE- AND DOUBLE-STRANDED NUCLEIC ACIDS USING MONOLITHIC CAPILLARY COLUMNS Anal. Chem., 72:4386-4393 (2000).					
E6T		Pretorius et al. A NEW CONCEPT FOR HIGH-SPEED LIQUID CHROMATOGRAPHY, J. of Chromatography, 99:23-30 (1974)				
E G+		Rathore et al. J. Chromatogr. A, 743: 231-246 (1996)				
Ea		Rodrigues et al. J. Chromatogr., 653:189 (1993)				
EGF		Scott et al. J. Chromatogr. Sci., 20:62-66 (1982)				
EXAMINER		THERKORN OC+ 9, 2002				



(use as many sheets as necessary)

Sheet 6 of 6

Complete if Known

**Application Number:** 

09/770,410

Filing Date:

01/25/2001

First Named Inventor:

Christian Huber, et al.

Art Unit:

1723

**Examiner Name** 

Therkorn, Ernest G.

Attorney Docket Number:

P-576

Confirmation No.

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
*EXAMINER INITIAL	CITE NO.	Include name of the author (in CAPITAL LETTERS), Title of the item, date, page(s), volume-issue numbers, publisher, city and/or country where published				
EG+		Seidl et al. Markroporose Styrol-Divinylbenzol-Copolymere Und Ihre Verwendung in der Chromatographie und zue Darstellung von Ionenaustauschern, Adv. Polymer Sci., 5:113-213 (1967)				
EGT		Snyder et al. Practical HPLC Method Development Eds., John Wiley & Sons, New York, pp. 40-47 (1997)				
EGT		Stults et al. Improved Electrospray Ionization of Synthetic Oligodeoxynucleotides, Rapid Communication in Mass Spectrometry, 5:359-363 (1991)				
EGT.		Suck et al. The Structure of a Trinucleoside Diphosphate:Adenylyl-(3',5')-Adenylyl-(3',5')-Adenosine Hexahydrate, Acta Cryst. B, 32:1727-1737 (1976)				
EGT		Svec et al. Temperature, A Simple and Efficient Tool for the Control of Pore Size Distribution in Macroporous Polymers, Macromolecules, 25:7580-7582 (1995)				
EGT		Takeuchi et al. J. Chromatogr., 253:41-47 (1982)				
EGT		Tomer et al. Capillary Liquid Chromatography/Mass Spectrometry, Mass Spectrometry Reviews, 13:431-457 (1994)				
E6T		Viklund et al. Chem. Mater., 9:463-471 (1997)				
E6T		Viklund et al. Monolithic, "Molded", Porous Materials with High Flow Characteristics for Separations, Catalysis, or Solid-Phase Chemistry: Control of Porous Properties During Polymerization, Chem. Mater., 8:744-750 (1996)				
EBT		Wang et al. Anal. Chem., 64:1232-1238 (1992)				
E6T		Xiao et al. MULTIPLEX CAPILLARY DENATURING HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY WITH LASER-INDUCED FLURORESENCE DETECTION, BioTechniques, 30:1332-1338 (2001)				
	<del></del>					
EXAMINER		THERKORN Oct 9,2002				